

## Claims

1. Device for determining the ametropia of an optical system (1), comprising a controllable optical element (2), characterized in that a measurement and control apparatus (3) forms a closed-loop control circuit with the controllable optical element (2) and the optical properties of the controllable optical element (2) can be modified manually.
2. Device according to the previous claim, characterized in that the optical system comprises a human eye.
3. Device according to one of the previous claims, characterized in that the optical system also comprises an artificial visual aid.
4. Device according to one of the previous claims, characterized in that the controllable optical element (2) is a controllable phoropter or an optometer and an astigmometer.
5. Device according to one of the previous claims, characterized in that the measurement and control unit (3) comprises an automatic refractometer or aberrometer.
6. Device according to the previous claim, characterized in that the controllable phoropter contains phase plates.
7. Device according to one of the previous claims, characterized in that the beam path of a treatment laser is also reflected into the beam path of the device.
8. Method for determining the ametropia of an optical system (1) with a device comprising a controllable optical element (2) and also a measurement and control apparatus (3), characterized in that in a first step the controllable optical element (2) is adjusted by the measurement and control apparatus (3) such that the ametropia of the optical system is compensated.

9. Method according to the previous claim, characterized in that in a further step the controllable optical element (2) is adjusted manually by the patient to achieve a subjectively optimum compensation of the ametropia.